

TN0006

High voltage module options for Pyramid products

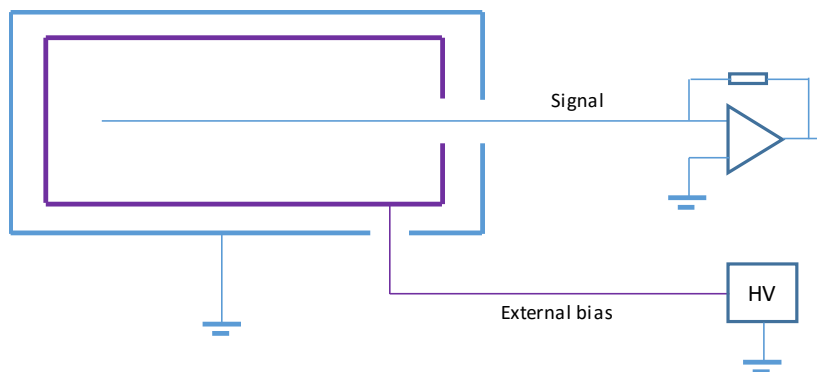
Pyramid products intended to read signals from sensor systems have the option to include a high voltage bias supply. This can be installed at time of manufacture, or added in a subsequent upgrade. HV bias is used for:

- Biasing ionization chambers and proportional chambers
- Biasing diodes
- Providing secondary electron suppression in Faraday collectors
- Providing the voltage gradient in electron multipliers and photomultipliers
- Biasing a sensing element so that secondary electrons are driven from it

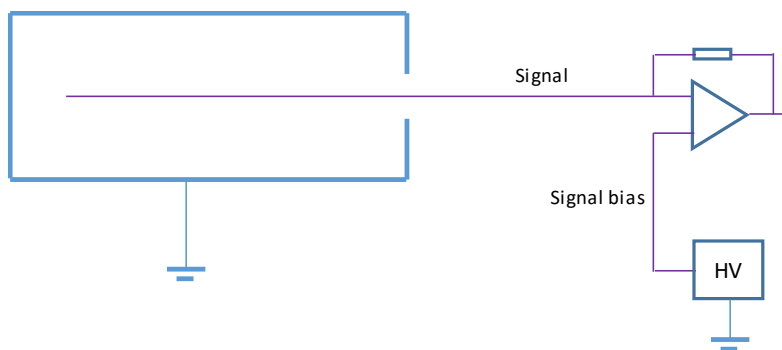
Bias configurations

There are two bias configurations, *External bias* and *Signal bias*. All the relevant products allow external bias supplies to be fitted, whereas only the I400 product also allows signal bias to be fitted. The distinction rests on whether the signal being measured is referenced local ground, or is being measured at a voltage different from local ground. Two ionization chamber configurations illustrate the difference.

Using external bias:



Using signal bias:



Bias module types

All bias modules are rated for one watt output power. The polarity and maximum voltage must be specified at time of order. The output voltage is controllable via software over the range of the bias module, which is usefully from about 10% of full rating to full rating.

Bias options

HV module options

- ✓ = available option
- ✓ (in green box) = popular option

External HV bias options Sales code suffix	-3000	-2000	-1000	-500	-200	-20	+20	+200	+500	+1000	+2000	+3000
	-XN30	-XN20	-XN10	-XN05	-XN02	-XN002	-XP002	-XP02	-XP05	-XP10	-XP20	-XP30
IC101	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
I200			✓	✓	✓			✓	✓	✓		
I404	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
I400		✓	✓	✓	✓			✓	✓	✓	✓	
I3200		✓	✓	✓	✓			✓	✓	✓	✓	
I6400		✓	✓	✓	✓			✓	✓	✓	✓	
I128		✓	✓	✓	✓			✓	✓	✓	✓	
F100			✓	✓	✓			✓	✓	✓	✓	
F460	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F3200E		✓	✓	✓	✓			✓	✓	✓	✓	
C400		✓	✓	✓	✓			✓	✓	✓	✓	

Signal bias options Sales code suffix	-400	+400
	-N04	-P04
I400	✓	✓

Further information

Contact Pyramid at support@ptcusa.com for further information.